treme sensitiveness of the anal region neither method should be attempted without the use of an anesthetic.

If simple dilatation is to be resorted to, it may be accomplished by inserting one or two fingers of both hands well into the rectum, and stretching the sphincters by drawing upon them in all directions; or the same end may be attained by the use of a powerful speculum. The process should be persisted in until the sphincters become perfectly relaxed, and must usually be repeated several times before perfect relief can be obtained. It is claimed, however, that a single introduction of a speculum for purposes of examination has now and then completely eradicated the difficulty.

The combined plan of treatment by dilatation and incision has been found so efficient and satisfactory that it has received the sanction of by far the larger number of operators. By no other method can we hope for so rapid and perfect relief from the main feature of the disease, the excruciating pain which attends and follows an evacuation. The details of the procedure are very simple. The rectum having been thoroughly washed out and the patient etherized, the fissure is exposed between the blades of a speculum. A free incision is then made through the floor of the ulcer extending at either end considerably beyond its limits. If the lesion be of long standing and deep seated, the knife should be carried into and across the border of the external sphincter muscle. Subsequently the process of dilatation should be fully completed as before described. After treatment consists in maintenance of cleanliness and attention to the bowels.

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## A PLEA FOR THE EARLY AND SYSTEMATIC REMOVAL OF THE INGUINAL LYMPHATIC GLANDS.

### IN CASES OF MALIGNANT GROWTHS IN REGIONS FROM WHICH THESE GLANDS RECEIVE LYMPHATICS.

Read in the Section on Surgery and Anatomy, at the Forty-fifth Annual Meeting of the American Medical Association, held at San Francisco, June 5–8, 1894.

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The rule that operations for the removal of malignant growths should include also the removal, not only of glands already perceptibly enlarged from secondary deposits, but also those which from their anatomic relations to the primary growth are likely to become the seat of secondary disease, as now quite generally followed in operations for mammary cancer, has been productive of much good. The fact that we can not determine by our examination whether a gland, though not perceptibly enlarged, may not after all be the seat of a secondary deposit, and the further fact that when those glands nearest the primary seat of disease have become enlarged, others more remote may in turn have become infected,—these facts form a sufficient argument for the general adoption of the above rule wherever practicable.

I was somewhat surprised therefore, on looking up the literature on malignant growths of the external genitals and the lower extremity, to find how little was said in our standard text-books concerning the management of the inguinal glands in such cases.

Two cases occurring in my practice during the last half year, brought the importance of this subject to my attention so strongly that I concluded to use them as a text for this plea for early attention to the glands in such cases:

*Case 1.*—M. K., male, aged 48 years, single, farmer, German. Family history good, except that one brother died of cancer of the stomach when 27 years old. Phimosis since childhood. During the summer of 1892 noticed swelling at end of penis. This was followed by inability to void urine, use of catheter, purulent discharge from the swelling and hemorrhage. Penis amputated near its root, March 20, 1893. No glands extirpated at that time. Several weeks later some enlarged glands were extirpated in the left inguinal region, but others in the same locality, as well as in the right groin, began to enlarge almost immediately.

Present condition (July 4, 1893) appearance of cachexia, although general nutrition fair; stump of penis healed, except a small granulating surface around urethral opening. Testicles healthy. Both groins occupied by large masses of enlarged confluent glands, those on the left in a more advanced stage, and the skin covering them sloughing, the abdominal walls considerably involved, the masses very painful. Thorough removal being out of the question, parenchymatous injections of pyoktannin were tried, which was effective in so far as they prevented all odor; but the disease progressed rapidly and ended in death Oct. 3, 1893, less than seven months after the primary operation. There was no return at the primary seat of disease nor any evidence of metastases in internal organs.

*Case 2.*—Mrs. D., aged 67 years, married, American. Family history shows no cases of malignant disease. Severe pruritus and eczema vulvæ for past fifteen or twenty years; lately severe burning and sharp pains. Examination shows a flat epithelioma, about an inch in diameter, involving the clitoris and upper portion of the left labium minus, which was excised Nov. 18, 1893. Careful examination at this time failed to detect any enlarged inguinal glands. Healing rapid, mostly by first intention. About five weeks later, several glands in left groin became rapidly enlarged and were extirpated Jan. 11, 1894. No infiltration outside of the gland capsules. Glands contained large cysts filled with grumous, semi-purulent matter. Every particle of gland that could be detected by the touch was removed. Healing again rapid, leaving a small fistulous track leading to the bottom of the wound, with slight grayish, liquid discharge. Recurrence in same locality within a month, the swelling increasing rapidly involving the skin and occupying the entire left inguinal region. The right side remained unaffected. Third operation Feb. 15, 1894. Removal of entire contents of left inguinal region, including skin, adipose tissue and glands down to the deep fascia, as well as the glands lying along the large vessels and belonging to the deep inguinal group. The removal of all the tissues mentioned was not difficult, the region of the vessels being left until the very last. Wound partly closed and packed with iodoform gauze; it remained in good condition, but showed no tendency to heal. The patient rallied well from the operation, but after a week began to fail from exhaustion, or possibly, secondary internal complications, and died March 4, two and one-half weeks after the last operation and less than four months after the extirpation of the primary disease. No return at primary seat of disease.

These cases show clearly that there must have been secondary deposits in the lymphatic glands at or before the time of removal of the primary disease, notwithstanding the fact that they were not perceptibly enlarged. They further show the great tendency of malignant disease of the external genitals to secondary location in these glands, and the great malignancy when once it has become thus located.

If malignant growths are of local origin, the early and thorough removal of the primary disease, as well as of those structures which are almost invariably the first foci of secondary invasion, can be reasonably expected to lead to a fair percentage of permanent cures, as has been sufficiently shown by the results of extirpation of the cancerous mamma, with simultaneous clearing out of the axillary space. On the other hand, if the glands are left until they have become enlarged, the results will as a rule be very

similar to those illustrated in the cases just outlined.

Why, then, not apply the rule which has long since been adopted in cases of mammary cancer, with equal force and regularity to the cases here under consideration? The difficulties and dangers of the operation for removal of the inguinal glands are certainly not greater than those attending the operation in the axilla, and the same may be said of the after treatment of the wound. After the skin has become involved, a large and disagreeable wound may indeed be left, just as in other regions, which fact is only another argument for adopting the extirpation of these glands as an essential part of the operation done for the removal of the primary disease.

I have limited my remarks to cases of malignant disease affecting the external genitals. All that has been said, however, pertains as well to the lower extremities, skin of lower portion of abdomen, and all structures sending lymphatics to the superficial or deep inguinal glands. For anatomic considerations and surgical technique I must refer to works on these subjects.

## BLOODLESS VAGINAL MYOMECTOMY.

Read in the Section on Surgery and Anatomy at the Forty-fifth Annual Meeting of the American Medical Association held at San Francisco, June 5-8, 1894.

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Probably no question of abdominal surgery has given rise to more animated discussion and bitter controversy than the treatment of uterine fibroids in all their three varieties—submucous, interstitial and subserous. After electrolysis failed to realize the hopes that were held out to the profession by Apostoli, laparo-myotomy and abdominal hysterectomy were once more eagerly resorted to, and led to many modifications in treating the pedicle so as to avoid hemorrhage and infection. Present indications are that all these methods will soon be discarded for the more correct and ideal operation of removing the uterus *in toto*. Arrest of growth of the neoplasms was sought by bringing about artificial menopause following oöphorectomy. More recently, ligation of the uterine and ovarian arteries has been recommended to effect atrophy of the growths and uterus. Vaginal enucleation is only applicable to such tumors as either can be pulled through the cervix, or those that appear as fibroid polypi, having their seat in the body or cervix of the uterus. The removal by morcellation, as originated by Péan, of large submucous myomata or pediculated fibroids distending the cavity of the uterus, although favorably recommended by many eminent surgeons, has never found much favor with the profession at large. The reason of this is the excessive hemorrhage that endangers the life of the patient. Some authors supplemented Péan's morcellement by first splitting the cervix bilaterally as far as the vaginal junction, and extending these incisions even into the body of the uterus itself, if necessary, to have the required room for their operations, and then ligating the uterine arteries to control hemorrhage. These preliminary incisions into the cervix and uterus have been regarded as such severe preparatory measures that most surgeons prefer abdominal hysterectomy.

The preservation of the womb of a young woman is a matter of most vital importance, and our aim should be a conservative plan of treatment that will remove the benign neoplasm, and will not carry in its wake sterility fraught with such momentous psychical and physical sequelæ. In the following case in my practice, I have successfully removed a fibroid tumor by morcellation, without any hemorrhage to speak of, by means of *temporary ligation* of the uterine arteries, having first caused obliteration of the cervix and dilatation of the os by vaginal packing, inducing contractions similar to the first stage of labor:

Mrs. H., age 28, of previous excellent health, gave birth five years ago to a living child, passing a normal puerperium. Since then her menses were regular until ten months ago, when about two weeks after menstruation, patient had a hemorrhage which lasted about two days, accompanied with pains in the back and groins. From then on, hemorrhage occurred at irregular intervals, with more or less pain. Four months ago, while constantly losing in weight and strength, patient noticed an increase of abdomen, which was very hard to the touch. Consulting a notorious quack, he pronounced the growth to be a cancer, and patient became alarmed about her condition. During the past eight months patient had lost forty pounds, and at the time of consultation weighed ninety-eight pounds. The lower abdomen protruded, the uterus was plain to the touch, enlarged and perfectly smooth, the fundus a finger's breadth below the umbilicus, corresponding in size to the fifth month of pregnancy. Auscultation revealed no sounds over site of uterus. The os was sufficiently dilated to permit the entrance of one finger, which felt a hard smooth mass. The digital examination caused quite a hemorrhage, so vaginal packing with iodoform gauze was employed to check it. Twenty-four hours after the packing was removed, the cervix was found obliterated, os dilated to the size of a silver dollar. Removal of the tumor, per vaginam, was proposed to the patient, and at the same time permission was obtained that if this should prove unsuccessful, abdominal hysterectomy should be resorted to, to remove the growth and uterus.

The idea suggested itself to me to try and prevent, or to reduce hemorrhage to a minimum by passing a temporary ligature *en masse* around the uterine artery. The vagina having been thoroughly irrigated with a 2 per cent solution of lysol and a Martin posterior speculum *in situ*, the field of operation was still further enlarged by retractors. With a strong volsellum forceps seizing the tumor, tumor and uterus were strongly pulled downward and to the right side in order to bring into view the vaginal junction of the cervix. With a large, strongly curved needle, threaded with a double thread of No. 12 braided silk, a ligature *en masse* was applied around the uterine vessels, by entering the needle well anteriorly to the transverse median line of the fornix, bringing it out equi-distant posteriorly to that line, and the two ends of the ligature were then securely tied. The uterus including the tumor being strongly pulled toward the left side of the patient, a temporary ligature *en masse* was applied to the uterine vessels on the right side. Morcellation of the fibroid was proceeded with by means of a pair of Sims' scissors, guided by the finger, which resulted in bringing forth forty-eight small pieces of the tumor until sufficient room was made to deliver the large remaining mass by traction. The weight of the tumor was nearly four pounds. Before the operation the tumor must have measured six and one-half inches in diameter. This was ascertained by enveloping the removed pieces in a towel and measuring the circumference of the enclosed mass. The uterine cavity was packed with iodoform gauze and the temporary ligatures were removed. Patient was given two hypodermic injections of ergotin. The time required for the operation was one hour, during which time the patient did not lose more than two or three tablespoonsful of blood. Twelve hours after the operation the intrauterine tampon was found forced out of place to more than half its extent, and showed very little bloody discoloration. The second day after the operation, the remainder of the tampon was removed, and as a precautionary measure the patient received a hypodermic injection of ergotin. Patient was kept in bed for twelve days, passing an uneventful time toward recovery, the temperature at no time rising above 99.2 on the evening of the operation. On the twelfth day patient left her bed, a convalescent, rapidly gaining in weight, until now she shows an increase of twenty-six pounds.